

EPA REGION 6 ANNUAL PRETREATMENT PROGRAM WORKSHOP

Hospitals for a Healthy Environment Related to Pretreatment Programs

April 14, 2004

Jill Russell, TPDES Pretreatment Program
Texas Commission on Environmental Quality
jrussell@tceq.state.tx.us
(512)239-4564



State of Texas Draft Workplan

Basis of the Hospitals for a Healthy Environment (H2E) Workplan

- ▶ Designed to support the partnership between the H2E voluntary members, the Texas Commission on Environmental Quality (TCEQ), and the U.S. Environmental Protection Agency (EPA)



State of Texas Draft Workplan

Basis of the H2E Workplan

- ▶ The H2E voluntary members include organizations such as the American Hospital Association, nurses associations, organizations of rural and community hospitals, and associations of health care facilities management



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Elements of the H2E Workplan

- ▶ Promote:
 - ▷ the elimination of mercury use
 - ▷ a reduction in total waste volume
 - ▷ ethylene oxide and persistent bioaccumulative toxics (PBT) reduction
 - ▷ current technical assistance tools and guidance available



State of Texas Draft Workplan

Elements of the H2E Workplan

- ▶ Provide guidance, training and outreach assistance to develop environmental management systems (EMS)
- ▶ Organize recruitment activities as appropriate for health care facilities



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Elements of the H2E Workplan

- ▶ Provide a point of contact to assist members in reaching their environmental goals
- ▶ Promote H2E through conferences, workshops and outreach activities
- ▶ Coordinate information and promote the H2E program through websites and promotional materials



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Elements of the H2E Workplan

- ▶ Identify incentives appropriate for H2E members
- ▶ Provide a framework to promote incentives
- ▶ Communicate measurable environmental results to the public



H2E and the Pretreatment Program

How the H2E program may affect your pretreatment program

- ▶ Identify how medical facilities are disposing of their pharmaceuticals
 - ▷ *Pharmaceuticals - prescription and over-the-counter medications*
 - ▷ *Reducing solid wastes should not result in an increase in disposal of wastes into the collection system*



H2E and the Pretreatment Program

How the H2E program may affect your pretreatment program

- ▶ Identify how medical facilities are disposing of their pharmaceuticals
 - ▷ *Medical facilities may believe that all nonhazardous waste pharmaceuticals could be discharged without permission from the publicly owned treatment works (POTW)*



H2E and the Pretreatment Program

How the H2E program may affect your pretreatment program

- ▶ Identify the pharmaceuticals potentially being discharged to your POTW from medical facilities
 - ▷ *Pharmaceuticals do not fall in the category of conventional pollutants*
 - ▷ *They should only be accepted into your POTW if they are compatible with the operation of your wastewater treatment plant*



H2E and the Pretreatment Program

How the H2E program may affect your pretreatment program

- ▶ Identify the pharmaceuticals potentially being discharged to your POTW from medical facilities
 - ▷ *Pharmaceuticals should only be accepted after you have evaluated whether they have potential to cause interference or pass through*
 - ▷ *If you have water reuse customers, then evaluate their needs before accepting pharmaceuticals*



H2E and the Pretreatment Program

*How the H2E program may affect your
pretreatment program*

- ▶ Some pharmaceuticals may contain:
 - ▷ *Arsenic*
 - ▷ *Barium*
 - ▷ *Cadmium*
 - ▷ *Chloroform*
 - ▷ *Chromium*
 - ▷ *Lindane*



H2E and the Pretreatment Program

*How the H2E program may affect your
pretreatment program*

- ▶ Some pharmaceuticals may contain:
 - ▷ *M-cresol*
 - ▷ *Mercury (thimerosal) or (phenylmercuric acetate)*
 - ▷ *Selenium*
 - ▷ *Silver*



Pretreatment Program Legal Authority

Requirements

- ▶ Must enable POTW to enforce all national pretreatment standards
- ▶ Establish control mechanisms as legally binding documents
- ▶ Require compliance with applicable pretreatment standards and requirements



Pretreatment Program Legal Authority

Requirements

- ▶ Require industrial users (IUs) to develop compliance schedules where necessary
- ▶ Inspect, monitor, and survey IUs to determine compliance or noncompliance
- ▶ Enforce standards to obtain remedies for noncompliance by IUs



Pretreatment Program Legal Authority

Be familiar with your ordinance requirements

- ▶ Ordinance language should include prohibition of materials known or suspected of being toxic to humans, animals, aquatic life, the environment, or to biological or other wastewater treatment processes



Pretreatment Program Legal Authority

Be familiar with your ordinance requirements

- ▶ More specific language may prohibit liquid and solid pharmaceutical wastes, such as intravenous (IV) bags containing biologically active materials (antibiotics, painkillers and chemotherapy agents) and controlled substances



Pretreatment Program Legal Authority

Be familiar with your ordinance requirements

- ▶ Best management practices may be suggested to waste excess material in syringes into a medical waste container prior to or after the administration of injections
- ▶ Medical facilities should be encouraged to reduce pharmaceutical discharges to the sewer to the extent feasible



Interjurisdictional Issues

Be familiar with industrial users outside of your jurisdiction

- Contracts or other agreements are necessary to control industrial discharges located in other jurisdictions
- Some control authorities (CAs) assist multijurisdictional partners with technical assistance to IUs and enforcement activities



Enforcement Response Plan

The enforcement response plan describes the elements of enforcement

- ▶ The enforcement response plan (ERP) describes how the CA may incorporate pollution prevention alternatives as an optional enforcement response



Enforcement Remedies

- Supplemental actions in an enforcement response guide (ERG) may include:
 - ▶ *Pollution prevention activities, including development of an EMS*



Local Incentives

*What types of incentives do your
H2E representatives want?*

- Find out what type of incentives would be available within your approved pretreatment program
- Some incentives may be developed as a nonsubstantial modification



Local Incentives

What types of incentives may your community offer?

- Find out what your community would be willing to provide, i.e. coordinated recycling activities, recognition program awards
- Look into expanding your community's household hazardous waste program to include unwanted or unused pharmaceuticals



Resources

The incentives and technical assistance you are able to provide may depend on available resources

- ▶ Funding
- ▶ Qualified Personnel
- ▶ Equipment



Factors Affecting Resources

The incentives and technical assistance you are able to provide may depend on available resources

- ▶ Size of treatment system
- ▶ Number and size of medical facilities
- ▶ Interjurisdictional relationships
- ▶ Political considerations



Technical Assistance

Expand your awareness of the medical community

- When conducting your IU inspections, begin observing whether containers that require biohazard sticker symbols have them visibly attached
- Ask about pharmaceuticals that are discharged to the POTW
- Recommend environmentally preferable purchasing, i.e. recycled and reusable materials



Technical Assistance

Contact your state H2E representatives

- The primary sources of information may be:
 - *The pollution prevention staff of your state environmental agency or the H2E representative of EPA Region 6*
 - *The H2E websites*



SUMMARY

Participation in the H2E program

- ▶ Educate your staff on the basics of the H2E program as resources and time are available
- ▶ Determine if your medical facilities are participating in the H2E program
- ▶ Encourage your medical facilities to participate

